Patent Claims

1. Device for depositing sheets for a printing machine, preferably an electrophotographically operating printing machine, said device comprising at least one
rotating drivable sheet transport element, which is designed to receive or grasp
a leading edge of a sheet and deposit said sheet on a stack after said sheet has
traveled a path of rotation, and comprising at least one drag element for pulling
a sheet that has been deposited on the stack toward a mechanical stop,

characterized in that

the drag element is coupled with the rotation of the sheet transport element and is arranged in such a manner that said drag element can assume an inoperative position within the region covered by the rotating sheet transport element and that said drag element, in order to perform its dragging function, can be moved at least partially out of the region covered by the rotating sheet transport element.

- 2. Device as in Claim 1, <u>characterized in that</u> the drag element is linked in such a manner that it can be pivoted.
- 3. Device as in Claim 2, <u>characterized in that</u> the pivoting element is linked in such a manner that, during its rotation in the region of the stack, it folds out into its dragging position due to its weight and, in the course of the path of rotation, folds in again into its inoperative position.
- 4. Device as in Claim 3, **characterized in that**, in order to achieve the effect of weight, a weight element is connected with the drag element.
- 5. Device as in Claim 4, **characterized in that** the weight element substantially has the configuration of an arm.

- 6. Device as in one of the previous Claims, <u>characterized in that</u> the drag element is substantially arm-shaped and its free end points essentially in a direction opposite the rotary motion.
- 7. Device as in Claims 5 and 6, <u>characterized in that</u> the arm-shaped weight element and the arm-shaped drag element are connected with each other substantially approximating a V-shape, and that, around their region of connection, a privoting axis is provided for their joint pivoting motion.
- 8. Device as in one of the previous Claims, <u>characterized in that</u> at least two coaxially rotatable cooperating sheet transport elements are provided, the first sheet transport element featuring a generated surface acting as a support for the sheet, thus essentially predetermining a path of curvature for the sheet to be transported, and the second sheet transport element comprising at least one overlap element to overlap the received leading edge of the sheet in such a manner that the leading edge of the sheet can be grasped between said overlap element and said generated surface.
- 9. Device as in Claim 8, <u>characterized in that</u> the drag element is coupled with the second sheet transport element, and that the drag element, in its inoperative position, is substantially configured and positioned, viewed from the front side of the device, approximately in such a manner that said drag element is congruent with said overlap element.
- 10. Device as in Claim 8 or 9, <u>characterized in that</u> the first sheet transport element has substantially the shape of a disk or wheel.
- 11. Device as in one of the Claims 8 through 10, <u>characterized in that</u> the second sheet transport element is substantially configured as a two-armed pivotable jib which has, in the region of its two radially outward extending free ends, an overlap element each, in which case a drag element is assigned to each overlap element.

- 12. Device as in one of the Claims 8 through 11, <u>characterized in that</u> the overlap element is configured substantially as a tongue or loop, which follows the path of curvature of the first sheet transport element in an approximately parallel manner.
- 13. Device as in one of the previous Claims, <u>characterized in that</u>, respectively, at least two first and at least two second coaxial sheet transport elements are provided, which are located relative to each other on a joint axis in a mirror-symmetrical manner, and that the two second sheet transport elements are arranged between the two first sheet transport elements, so that a leading edge of a sheet can be grasped in its course parallel to the joint axis of the sheet transport elements by a total of at least four sheet transport elements together, and that a drag element is assigned to each of the overlap elements.
- 14. Device as in Claim 5, <u>characterized in that</u> the side of the overlap elements of the second sheet transport elements facing the sheet is at a radial distance from the joint axis, which is smaller than the overlapped exterior side of the sheet applying its thickness to the radius of the generated surfaces of the first sheet transport elements, so that the leading edge of the sheet is forced in its travel, in a tension-generating manner in the region of the overlap elements, slightly into the direction of the joint axis and is thus bent, and that each drag element can also be pivoted out over the region covered by the first sheet transport element.
- 15. Device as in one of the previous Claims, characterized in that several, although preferably two, of each of the second sheet transport elements are provided in such a manner that these additional second sheet transport elements can be rotated about their joint axis substantially independently of each other, and thus one of these second sheet transport elements is ready to receive or grasp the next sheet when another of these second sheet transport elements is still occupied with transporting or depositing a previous sheet, and that a drag element is assigned to each of the overlap elements of each of these second sheet transport elements.

- 16. Device as in one of the previous Claims, <u>characterized by</u> at least one guide element that blocks one of the grasped sheets at least in centrifugal direction and is interposed between a pickup site and a release site of the sheet, in order to maintain the radius of curvature of the sheet by force.
- 17. Device as in one of the previous Claims, <u>characterized by</u> at least one shifting element coupled with at least one of the sheet transport elements for transversely shifting a sheet to be deposited in a manner substantially parallel to the joint axis of the sheet transport elements.